

MEMORANDUM

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DATE: October 15, 2015

SUBJECT: Operational Position Statement for October 13 to October 19, 2015

The U.S. Army Corps of Engineers (USACE) is responsible for managing Lake Okeechobee water levels and makes operational decisions about whether to retain water or release water based on their regulation schedule release guidance (2008 LORS). The USACE makes this decision taking into account the best available science and data provided by its staff and a variety of partners, which includes the South Florida Water Management District (SFWMD).

The SFWMD team has discussed the system-wide environmental conditions, the water supply conditions, and has evaluated the overall status of the water management system. Detailed reports are available at the SFWMD Operational Planning internet page.

This Position Statement is for the period from October 13 through October 19, 2015. At the time of this recommendation, the Lake Okeechobee stage is in the lower third of the Low Sub-band. The SFWMD recommendation to the USACE is to follow the release guidance of 2008 LORS.

The District is conducting maximum practicable regulatory releases south from the lake, and Kissimmee Lake stages will be kept below the maximum winter pool elevation (up to 0.3 to 0.5 feet) to mitigate for the possibility of higher rainfall.

The most recent Climate Prediction Center (CPC) outlook for Central and South Florida indicates equal chances (EC) of below, normal and above-normal precipitation for the month of October and increased chances of above normal rainfall for the three-month window October to December. Consistent with forecast El Niño conditions, the CPC rainfall outlook for the 2015-2016 dry season predicts a substantial increase in the likelihood for above-normal precipitation. SFWMD rainfall for the month of October up to date is below average. Rainfall for the next two weeks is forecast to be below average.

Over the 7-day period from October 6 to October 12, 2015, a volume of 29,600 ac-ft was delivered from the lake to STA-1E, STA-1W, STA-2, STA-3/4 and the A-1 FEB. Discharges from the Lake to tide via C-10A, L-8 and C-51 canals amounted 3,900 ac-ft.

2008 LORS Release Guidance (Part C): The Lake Okeechobee stage is currently within the Low Sub-band and Part C of the 2008 LORS release guidance recommends "Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades Impacts".

Consistent with the LORS release guidance, the USACE is requesting the SFWMD to continue maximum practicable Lake Okeechobee regulatory releases to the WCAs. Runoff in the EAA has subsided and the District is maximizing the treatment of lake regulatory releases through the STAs.

District Everglades scientists have indicated that additional releases south would have minimal impact to the WCAs. Stages in WCAs are being kept close to regulation schedules and inflows from the lake are being moved south to reach ENP. Discharges from WCA-1 to WCA-2A through S-10D were discontinued on October 6. Discharges from STA-2 into WCA-2 are being delivered to WCA-3A through the S-11 structures. STA 3/4 discharges are being sent to central WCA-3A. NE WCA-3A is now under water and continued discharges through S-150 will help maintain current depths.

S-333 and all the S12s structures have been opened in order to deliver as much as possible of the ERTF and the SRS Rainfall Plan prescribed releases from WCA-3A to ENP. Increased releases into the ENP are being also recommended by District Everglades scientists.

2008 LORS Release Guidance (Part D): The Lake Okeechobee stage is currently within the Low Sub-band and Part C of the 2008 LORS release guidance is "S-79 up to 3,000 cfs and S-80 up to 1,170 cfs".

No regulatory releases from Lake Okeechobee to the St. Lucie and Caloosahatchee Estuaries have occurred since June this year. Over the past week, flows averaging around 240 cfs entered the St. Lucie Estuary through S-80, with no contributions from the lake. Flow at S-79 averaged approximately 1,600 cfs.

SFWMD lake scientists report that from an ecological point of view the current stage ascension rate is within the recommended maximum value and lake stage is near the top of the optimal range for this time of the year. As far as possible, a steady increase in stage not to exceed 0.5 feet per month is recommended. From an ecological point of view it will be beneficial for the lake to be close to 15.5 feet NGVD by the end of November.

In the St. Lucie Estuary, salinity is in the good range for adult oysters. In the Caloosahatchee Estuary, salinity continued to be in the good range for adult oysters at Shell Point and Sanibel, and increased to the fair range at Cape Coral.

Conditions in Florida Bay continue to be hypersaline with salinities 7 to 21 psu above average for this time of the year. The 30-day moving average salinity at the Taylor Slough (MFL sentinel) site increased from 10.9 to 14.7 psu, well below the 30 psu MFL criterion. High salinities are a result of below average wet season rainfall for the Everglades and the southern portion of the District, high evaporation, and exceptionally low freshwater inflows into the Bay. Fresh water inflows decreased and continued to show some reversed flow direction. Additional rainfall amounts will increase fresh flows and reduce salinities in Florida Bay. Also as of September 22, the WCA-3A rainfall-based management plan is calling for releases into the ENP.

SFWMD Lake Okeechobee Adaptive Protocol (AP) Release Guidance

This week the SFWMD is not applying the Lake Okeechobee Adaptive Protocol release guidance flowchart since the Lake Okeechobee stage is above the Base-flow Sub-band of the 2008 LORS. The Adaptive Protocols process is documented in the District publication Final Adaptive Protocols for Lake Okeechobee Operations (September 16th, 2010).

The SFWMD governing board directed staff to use the SFWMD's Lake Okeechobee Adaptive Protocols (AP) release guidance as the basis for S-77 release recommendations to the USACE when the lake stage is within or below the Base Flow Sub-band.

For additional information pertaining to operations history and past recommendations, refer to the archives of LORS-2008 Release Guidance outcomes and operational position statements at www.sfwmd.gov under the Operational Planning topic.